

■ Electronic temperature control system EHS for electric heater batteries

□ Electronic controller for electric heater batteries installed in circular or rectangular ventilation systems. Controls the heat output of heating element by monitoring the supply air temperature against the required temperature.

■ Continuous control is achieved by a proportional timer which allocates power in time intervals. The relation between on and off time periods is adjusted to the required heat. Switching sequence in compliance with electricity boards can be obtained even with high switching power.

■ Power regulation without contacts through electronic power switch.

■ Control via desired value encoder (internal or external, room sensor TFR) or via remote signal 0–10 V DC (only in EHSD models).

■ Application

□ The controllers are designed to maintain a constant supply air temperature and a constant room temperature. With rapid change in supply air temperature the unit first gives a considered response whilst checking whether the change is going to be sustained and then goes to full proportional response. All models feature a night set-back facility which can be activated using a time clock (to be supplied on site externally).

□ For safety reasons an additional air flow sensor is required to monitor the air flow.

Air flow sensor, – electronic

Type SWE Ref. no. 0065
– mechanical, from NW 315

Type SWT Ref. no. 0080
see product page.

EHS



Electronic temperature controller for electric heater batteries up to 3.5 kW (230 V)/6.4 kW (400 V) Type EHS Ref. no. 5002

Temperature sensitive semi-conductor controller. Attractive white polymer casing suitable for wall mounting. Constant supply air or room air control via built-in temperature sensor for temperature detection on installation site. Switchable on remote duct sensor or room sensor (TFK or TFR, accessory). Automatic detection of supply voltage 230 V 1 ph. or 400 V 2 ph.

Voltage 230 V, 1~ / 400 V, 2~
(automatic detection)
Loading capacity (current) 16 A
Protection to IP 30
Dim. in mm H 153 x W 93 x D 40
Weight approx. 0,3 kg
Wiring diagram no. 531

EHSD



Electronic temperature controller for electric heater batteries up to 17 kW Type EHSD 16 Ref. no. 5003

Temperature sensitive semi-conductor controller. Robust aluminium casing suitable for wall and switchboard mounting. Constant supply air or room air control via external duct sensor or room sensor (TFK/TFKB or TFR, accessory). Remote control via external desired value encoder TFR or external control voltage 0 – 10 V DC.
Voltage 400 V, 3~
Loading capacity (current) 25 A
Protection to IP 40
Dim. in mm H 207 x W 160 x D 95
Weight approx. 1,7 kg
Wiring diagram no. 550,2

■ Other accessories for EHSD

In-duct temperature sensor for limiting functions.
Type TFKB Ref. no. 5009

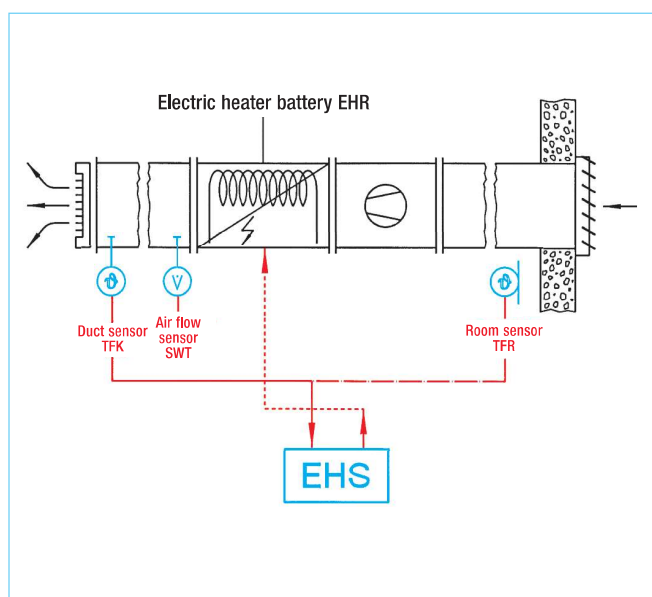
■ Note

The on-site required system control which corresponds to the wiring diagrams shall be provided.

Electronic temperature controller for electric heater batteries up to 34 kW Type EHSD 30 Ref. no. 5004

As EHSD 16 but with a maximum output of 34 kW. The total output is split into a controlled output (max. 17 kW) and an uncontrolled basic output (17 kW). If the required power exceeds approx. 17 kW the basic output of 17 kW will be activated permanently via an internal contactor. The remaining output will be temperature controlled.

Voltage 400 V, 3~
Loading capacity (current) 25 A
Protection to IP 40
Dim. in mm H 207 x W 160 x D 95
Weight approx. 1,7 kg
Switch relay Voltage 230 V~
Current max. 5 A
Switch relay Voltage 400 V, 3~
Current max. 25 A
Wiring diagram no. 550,2



Duct sensor (accessory for EHS) Type TFK Ref. no. 5005

Temperature sensor to detect the airflow temperature in ducting. Includes mounting plate to fit on duct wall.
Temperature range 0 – 30 °C
Protection to IP 20
Length inner/outer 130 / 50 mm
Ø 10 mm
Weight approx. 0,1 kg



Room sensor (accessory for EHS) Type TFR Ref. no. 5006

value encoder for surface mounting. Also suitable as desired value encoder or sensor only. Attractive casing made of polymer.
Temperature range 0 – 30 °C
Protection to IP 20
Dim. in mm H 86 x W 86 x D 30
Weight approx. 0,1 kg